

pockets of the American consumers and American businesses, but we will not achieve that if we look for solutions that are actually going to add to our CO₂ problems in the United States.

Let's be clear: There are great technologies that will help us in reducing greenhouse emissions. There are others that will be less appealing. I know it will be hard for my colleagues in areas where technology has not yet reached this point to be a market driver. More work needs to be done. But we should not be, in looking at our incentive policies, chasing technology that will not help us achieve the leadership the United States would like to see in fuel technology.

We know that cellulosic ethanol, which is the goal of this underlying bill—and I was proud, in the 2005 act, to write the cellulosic mandate as part of the underlying legislation. Cellulosic—plant-based ethanol—plant-based ethanol from gasoline today would be a 90-percent reduction in our CO₂ footprint. We want to go in that direction as a nation, using plants to create a fuel source for America. We want to do that not only for what it achieves for us in reduction of CO₂ but because it also doesn't compete with our food source in America and drive up food prices.

Biodiesel, another great reduction in greenhouse impact at 67 percent, is an area in which we can, for our large industrial users, provide an alternative fuel to help our economy grow. Sugar-based ethanol, at 56 percent, as the country of Brazil is doing, is again a reduction in the CO₂ and an opportunity to scale a technology to help an entire nation.

We also know that for us, electricity, or plug-in hybrids, could see a 46-percent reduction.

We know we will have a very interesting debate on the Senate floor about corn-based ethanol, and we will have to be honest about where corn-based ethanol can take us in the future. It is not the alternative fuel that will help drive our economy.

We know corn-based ethanol will not be the technology that continues to have the opportunities for us that these other advanced fuels do. So we need to be smart about the investment strategy.

I need to say a little about the coal to liquid or carbon sequestration issues. That technology does not yet exist for the breakthrough we would like to see. It will actually add—add—to our CO₂ emissions if people deploy this technology today as a solution for us in trying to get off foreign oil.

So we need to be smart about our plans. We need to make sure we are keeping more energy dollars in America's pocketbook. We need to make sure we get on to this next chapter in American history and make sure we are not continuing 3 years from now to talk about record oil prices but about how American consumers are paying less at the pump, getting more alternatives, and that new jobs are created

by the new direction in an energy economy we are about to see unfold.

I thank the Chair, and I yield the floor.

CONCLUSION OF MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Morning business is closed.

CREATING LONG-TERM ENERGY ALTERNATIVES FOR THE NATION ACT OF 2007—MOTION TO PROCEED

The ACTING PRESIDENT pro tempore. Under the previous order, the Senate will resume consideration of the motion to proceed to H.R. 6, which the clerk will report.

The legislative clerk read as follows:

A bill (H.R. 6) to reduce our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes.

The ACTING PRESIDENT pro tempore. The Senator from Colorado is recognized.

Mr. SALAZAR. Mr. President, I ask unanimous consent to speak for a period of up to 20 minutes on the legislation and that following my remarks, Senator ALEXANDER speak for a period of up to 30 minutes.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. SALAZAR. Mr. President, I rise today to praise the progress this body is making toward reducing our dependence on foreign oil. In 5 short months, we have assembled and advanced a package of energy proposals that will strengthen the foundation of a new, clean energy economy for our Nation.

Senator BINGAMAN and Senator DOMENICI have led us to where we are today, as have the chairman and ranking member of the Finance Committee, the Environment and Public Works Committee, and the Commerce Committee. The bill before us today, H.R. 6, is a product of many minds and many good ideas.

The extraordinary progress the Senate has made in the last 5 months responds to a seismic shift in how Americans are thinking about energy and about our world. At no time in our history—at no time in our history—has energy been so clearly a matter of national security, of economic security, and of environmental security. The issue before us is fundamentally about the security of the United States of America.

Think back to 2000. At that time, it seemed that the threat of Islamic radicalism was confined to foreign soil. Few understood the urgency of combating climate change at that time. Gas prices at that time were \$1.20 per gallon. That price cloaked the real

costs and the real danger of our dependence and our addiction to foreign oil.

Today, this is all different, and fortunately, today, the people of America and this Senate are recognizing it is all different. In every corner of American society, the conventional wisdom about our energy policy has changed. The fact is, our dependence on foreign oil affects the lives of Americans each and every day. It touches our security, our pocketbooks, and our conscience.

Most strikingly, oil has become a major factor in global security. Our dependence—our dependence—our overdependence makes us vulnerable and weakens our standing in the world. Since 2001, China and Russia have partnered to lock up oil in central Asia, rolling us out of that region. Venezuela has wielded its resources to buy off its neighbors and to divide our hemisphere. Iran has used its oil resources to court Russia and China, convincing them to oppose our diplomatic efforts to stop Iran from building nuclear weapons.

Countries that wish us harm know about our addiction. They know any disruption in supply sends gas prices through the roof and slows our economy. They are happy—they are happy—our enemies are happy to profit from our addiction. Oil money lines the pockets of terrorists, extremists, and unfriendly governments. It funds the Hezbollah rockets and militias in Lebanon today. It reaches bin Laden, it reaches al-Qaida, and it finances the militants in Nigeria who kidnap and terrorize westerners.

The sad truth is that today we are funding both sides of the war on terror. We spent over \$100 billion last year to fight the extremists in Iraq and Afghanistan, extremists who are funded indirectly through the oil revenues we finance out of this country and around the world. This situation is absolutely crazy.

To make matters worse, our oil dependence is causing economic pain for Americans. With gasoline over \$3 a gallon and holding, \$50 and \$80 visits to the gas stations for family members to fill their cars are straining family budgets and frustrating small business owners. Across my State, the farmers and ranchers whom I fight for every day here are budgeting for the harvest, and they are having to budget for numbers that are astronomical that they never saw before. The question they ask themselves as they go to bed every night is whether they are going to be able to make enough money to pay off their operating line at the end of the harvest season.

Americans want affordable alternatives at the filling station.

So far they have few. We must move forward in providing those alternatives.

The third reason we are on the floor today with this legislation is our bill will help jumpstart a new energy economy. That new energy economy is

based on the environmental security threats we see from global warming. Climate change now stands as one of the greatest moral challenges of our time. It is an issue we are obligated to confront.

The desperation and disaster brought by Hurricane Katrina, Hurricane Rita, and a series of prolonged droughts, floods, and fire storms over the past several years have driven climate change to the center of American consciousness. We cannot afford to leave our children a legacy of an environmental disaster. We need to begin to work on that problem now, and this legislation begins to do that with respect to carbon sequestration.

This is not the beginning of our efforts here. In 2005, this Chamber, with most of the Members who are still here today, worked in a bipartisan fashion to pass the 2005 Energy Policy Act. The bill before us today is a significant step forward toward tackling the national security, economic security, and environmental security implications of our oil addiction. The 2005 Energy Policy Act was a first step in moving us in that direction.

We approached the 2005 Energy Policy Act much as we have this proposal today. It was a work Senators DOMENICI and BINGAMAN did—Senator DOMENICI was chairman and Senator BINGAMAN as ranking member, and now their roles are reversed. They said we have an energy problem and we can craft a better energy policy, and that received nearly 80 votes in the Senate. It is that same bipartisan approach that they have taken to this legislation. Other committees also contributed to the legislation before us today and have also taken that kind of approach. That is why, at the end of the day, we will succeed in moving forward with energy legislation in the Senate.

The bill in the 109th Congress, the 2005 Energy Policy Act, was perhaps the most important energy legislation passed in 20 or 30 years in this country. During that time, I traveled to all 64 counties in Colorado and spoke to the people of my State about that bill. By and large, they appreciated the balanced approach we took to the 2005 act. The bill kick started a renewable energy economy, made big investments in technologies, took a cut at consumption with smart efficiency measures, and it made sensible additions to our domestic oil and gas supply.

There remains much to be done, and that is why we are here today. We should not forget our bipartisan work of 2 years ago, which planted the seeds for our new energy economy; and today, in the week ahead, and in the following week, we will have an opportunity to build on the success of 2 years ago.

The new energy economy is in fact taking root. I don't think you will find a better example of how quickly Americans can change their approach to energy than in my State of Colorado. We have sparked a renewable energy revo-

lution in Colorado in just 2 years, and the benefits have already touched every corner of my State. Our farmers and ranchers are leading the charge. In Weld County, Logan County, and Yuma County, which are remote and far away from Denver, we are seeing biofuel plants spring to life, creating new markets and new opportunities for our rural communities. So the "forgotten America," in fact, is having new opportunities created for them because of the fact that we are embracing the clean energy revolution. Today, we have three ethanol plants that are already in production, where there were none 2 years ago. We have several others that are under construction and are being planned.

But it is not just biofuels. In the San Luis Valley, where my family has lived, ranched, and farmed for five generations, Xcel Energy just broke ground on the largest solar plant in North America. More and more wind turbines are turning on the plains of southeastern Colorado, powering front range homes, while providing incomes for the ranchers who own the land. Indeed, the current program with respect to the construction of wind energy farms in Colorado will mean that very soon we will be producing the same amount of electricity that is produced from three coal-fired powerplants in Colorado. That is enormous progress in a very short time.

How did we spark that renewable energy revolution in Colorado? The Energy Policy Act of 2005 helped, but it is not the only force of change. The National Renewable Energy Lab in Golden is the crown jewel of our labs, and it is a hub for innovation for our clean energy future. The President of the United States has visited NREL. Many colleagues in this Chamber have visited NREL. We do all we can here to support the work that the researchers are doing there today. We have created the Colorado Renewable Energy Collaboratory, which binds the National Renewable Energy Laboratory in Golden with the Colorado School of Mines, Colorado State University, and the University of Colorado. The collaboratory is an engine for ideas, technologies, and talent, and making sure those technologies are being deployed out into the private sector.

I have held a renewable energy summit in Colorado in each of the last 2 years. We have tried to connect the business community and those people with the ideas to make sure that deployment occurs. These summits have been a huge success and were attended by the business community, environmental interests, farmers, and ranchers. This last year, we had over a thousand people who attended that summit, which was sponsored by the Governor of Colorado, Governor Ritter, as well as mayors and other leaders throughout the State.

In Colorado last year, 2007, we actually moved forward in enhancing our renewable energy standard, our renew-

able portfolio standard for our State. The renewable energy revolution underway in Colorado makes me all the more excited about the bill we are considering today. Its provisions are sensible and, by and large, they are bipartisan and should be noncontroversial.

The bill includes 3 key components. First, it dramatically increases production and the use of biofuels. The bill will quintuple the existing renewable fuels standard to 36 billion gallons by 2022, 21 billion of which must be advanced biofuels such as cellulosic ethanol. That is more than enough to offset imports from Saudi Arabia, Iraq, and Libya combined. I will say that again. The 21 billion gallons of advanced biofuels, combined with what we produce from corn ethanol, will get us to 36 billion gallons. That amount of production from alternative biofuels is enough to offset our imports from Saudi Arabia, Iraq, and Libya combined. I make that point to underscore the importance of the biofuels and alternative fuels title in this legislation.

Second, H.R. 6 also helps us reduce our dependence by making better use of what we have. The transportation sector accounts for a full two-thirds of our oil consumption. It offers the cheapest and best opportunities for saving fuel. The bill helps automakers retool their vehicles by providing items such as loan guarantees for hybrids and advanced diesels. The bill will also make a reasonable increase in CAFE standards. The bill increases and incentivizes the engineering capabilities of our automakers.

Finally, the bill before us also begins to address the environmental consequences of our energy policy. The debate about how to tackle the threat of global warming will have few easy answers. It will be a difficult challenge for us when we get to specifically addressing the issue of global warming later in this Congress. But one thing we can do today is to determine how we can store the carbon we are currently putting into the atmosphere. Carbon sequestration technology is neither new nor complicated. It has been around in the oil fields in America for 50 years. We need to take that technology and refine our techniques for storing it and determine where we can store the carbon that is currently being emitted from powerplants and other sources around our country. This bill will help start us in that direction.

Mr. President, how much time do I have left?

The ACTING PRESIDENT pro tempore. Six minutes.

Mr. SALAZAR. Mr. President, I want to say I am very proud of this bill. I know a lot of work has gone into this bill. It is an impressive and thoughtful next step toward reducing our dependence upon foreign oil. In the coming days, I hope we can find ways to strengthen this legislation in some specific ways.

I want to speak very briefly about four amendments that several of my

colleagues and I will be offering in the several days ahead.

The first amendment I intend to offer is the 25x25 resolution, which establishes a national goal of producing 25 percent of America's energy from renewable sources, like solar, wind, geothermal, and biomass, by 2025. That resolution is a vision for where we want to get as Americans. It is sponsored by a great group of bipartisan Senators, including Senators GRASSLEY, HAGEL, HARKIN, LUGAR, OBAMA, and the Presiding Officer, Senator TESTER. That legislation was introduced earlier this year as S. Con. Res. 3, and it has received widespread backing. It is endorsed by 22 current and former Governors and many general assemblies from across the country. Nearly 400 organizations, from the Farm Bureau and the Union of Concerned Scientists, to John Deere, to the Natural Resources Defense Council, have embraced 25x25 and the vision incorporated in that amendment. I hope we can include that in this legislation.

The second amendment, which I will mention briefly, incorporates provisions from S. 339, the DRIVE Act. That is legislation which Senators BAYH, LIEBERMAN, BROWNBACK, SESSIONS, and 23 other Senators have been working on for a long time. It has a robust mandatory oil savings plan. The DRIVE Act aims to increase our Nation's energy security by cutting 2.5 million barrels per day from our Nation's oil use by 2016, and 10 million barrels per day from its oil use by 2031. I am hopeful these provisions will also be added to the bill.

Third, Senator BINGAMAN and I and others will be introducing an amendment to create a national renewable energy standard. Many States, such as Colorado, already have a renewable energy standard and are reaping the benefits. I know there will be debate and discussion about how exactly we move forward with the renewable energy standard. But I believe the time has come for our Nation to adopt a renewable energy standard in the same way many States have done, including my State of Colorado.

For example, a renewable energy standard of 20 percent by 2020 will reduce emissions of carbon dioxide by an estimated 400 million tons per year. That is equal to taking 71 million cars off of America's roads, or planting 104 million acres of trees. While we look at this renewable energy standard, I know we will have a debate about whether we can improve upon what we have done here. I look forward to that debate.

Finally, the Presiding Officer, Senator TESTER, from Montana, and I will be introducing an amendment to make better use of America's vast coal resources. Coal is to the United States what oil is to Saudi Arabia. The vast resource of coal from the great States of Montana, Colorado, Wyoming, West Virginia, and throughout our country, is something we need to use. But as we use our coal resources, we need to

make sure we are using them in a smart way so it doesn't damage our environment.

The amendment we will introduce will provide loan guarantees to build coal gasification facilities. We also will have standards in there with respect to life cycle greenhouse gas emissions from those facilities to make sure they are 20 percent lower than emissions from petroleum fuels. I appreciate the great work of my colleagues who have worked on that amendment.

How we improve our energy security and reduce our dependence upon foreign oil is the central national security, economic security, and environmental security challenge of the 21st century. It will determine whether we will continue to be entrenched in conflicts over resources in every corner of the world. It will determine whether we will triumph in our fight against oil-funded extremists and terrorists. It will determine whether our economic fortunes will hinge on the price of oil that OPEC sets, or whether the United States will stand proudly and independently as the world's innovator for clean energy technologies; and it will determine whether we will succeed in leaving our children and grandchildren a world wrought with environmental dangers, or whether we can correct our path in time.

I thank my colleagues for their great work on this bill, and I look forward to a productive and thoughtful debate and a successful conclusion to energy legislation in the days and 2 weeks ahead.

Mr. President, I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from Tennessee.

Mr. ALEXANDER. Mr. President, I thank the Senator from Colorado for his courtesy in arranging for me to speak next. The Senator from Colorado and I and the Senator from New Mexico, Mr. BINGAMAN, who is here, the chairman of the Energy Committee, Senator DOMENICI, the ranking member, and Senator LIEBERMAN, who has already spoken, were at breakfast this morning at our usual Tuesday morning bipartisan breakfast. And Senator BINGAMAN expressed the hope, as I am sure he will on the Senate floor when he speaks, that we can make the kind of progress this year that we made 2 years ago on the Energy bill. And I hope so too.

He talked about how difficult it was and how impressive it was for four committees, plus the Finance Committee, all to make a contribution and how we might be able to make progress with alternative fuels, with energy efficiency. The more we learn about energy efficiency, such as with appliances and lighting, and the more we can do in accelerating research on how to recapture carbon, the better off we will be.

Earlier this morning, Senator LIEBERMAN of Connecticut said in that spirit of bipartisanship that he hoped one amendment would not be added to this bill, and that would be an amendment calling for the drilling for oil in

the Alaska wildlife area. That is a controversial piece of legislation.

I want to make a similar suggestion in the spirit of bipartisanship. I note my friend from New Mexico is on the Senate floor, and I hope the Senate would not agree to and maybe we would not even have to debate, the amendment that Senator BINGAMAN offered before in the last Congress and which he plans to offer again which would require a 15-percent so-called renewable portfolio standard in every State. I wish to spend a few minutes this morning talking about why I believe it is important that we not adopt that amendment.

I am reminded of a story about a Tennessee mountaineer who was convicted of murder, and the judge sentenced him and told him his choice was to be hanged or be shot.

The defendant thought a minute and said: May I ask a question, judge?

The judge said: Of course.

My question is, Do I have another choice?

Mr. President, we Tennesseans feel the same way about Senator BINGAMAN's proposed renewable portfolio standard which would require us to make 15 percent of our electricity from renewable fuels, mostly wind power. That would raise our taxes, it would raise our electric rates, it would run away jobs, and it would ruin our mountaintops. That is not the kind of choice we like to have.

Forcing Tennesseans to build 40-story wind turbines on our pristine mountaintops or pay billions of dollars in penalty taxes to the Federal Government amounts to a judge giving a defendant the choice of being hanged or shot.

In Tennessee, the wind simply doesn't blow enough to produce much electric power. Residential homeowners cannot afford these new taxes, industries will take their jobs to States with cheaper power, and tourists will spend their dollars where they can see the mountaintops instead of giant wind turbines.

There is, in this case, a better choice, fortunately, and that choice is for clean, reasonably priced energy in the Tennessee Valley from conservation and efficiency, from nuclear reactors—a new one of which just opened within the last few weeks in our region by TVA—and by clean coal. Because of its nuclear and hydro plants, Tennessee is already on the honor roll, ranking 16th among States in production of carbon-free electricity. But we are one of 27 States that would not meet the standards under Senator BINGAMAN's amendment, which he expects to offer during this debate.

This is real money. The Tennessee Valley Authority suggests that by the last year that this new standard is in effect, it would cost Tennesseans at least 410 million new dollars a year.

What could we do with that kind of money? If the goal were clean air, we could give away 205 million in \$2 fluorescent lightbulbs per year, producing

energy savings equal to the combined output of almost two of the three units of TVA's Browns Ferry nuclear plant. In other words, the \$410 million could buy enough fluorescent lightbulbs to equal two nuclear reactors. Or the \$410 million would be the equivalent of 3,700 megawatt wind turbines that would span a 550-mile ridge line, more than twice the distance from Bristol in the northeast part of Tennessee to Chattanooga, which is about the only place in Tennessee that wind power could actually go, along those ridgetops. Or with \$410 million, we could pay the \$100 per month electric bill for Tennessee's 2.5 million residential TVA customers for 1½ months each year. Or if the goal is simply clean air, it would be better, I respectfully submit, to spend the \$410 million purchasing one new scrubber each 9 months to clean emissions from TVA's coal-fired powerplants. I strongly back renewable power wherever it makes sense. In our State, I have worked hard to expand solar energy. The solar energy industry gave me an award last year for that work. I was the principal sponsor of the tax credit for homeowners to put solar panels on their homes. I have worked with the Tennessee Farm Bureau to encourage the use of biomass as a renewable energy. But this—and I will try to be a little bit more specific in the next 10 or 12 minutes—this proposal amounts to a wind portfolio standard which simply does not fit the Tennessee Valley nor, I submit, any other part of our region. It simply does not work in the Southeast.

Why is there a wind portfolio standard? There are other forms of renewable energy, of course, but they don't all fit in the definition, nor do all types of clean, carbon-free energy fit within the definition. Seventy percent of our carbon-free electricity in America comes from nuclear power. About 33 percent of TVA's power is carbon-free nuclear power. That doesn't count within the Bingaman definition. Neither does the existing 7 percent of clean, completely clean power that comes from hydro, from dams.

That makes about 40 percent of TVA's electricity carbon, sulfur, mercury, and nitrogen free, ranking it 16th among all the States in terms of producing carbon-free energy. As I said, Tennessee is on the honor roll. Yet we Tennesseans would still be subjected either to these taxes or putting these wind turbines along our scenic mountains, which I will discuss.

According to the Energy Information Agency assessment of the Bingaman proposal, 4 years ago, wind and, to a lesser extent, biomass are projected to be the most important renewable resources stimulated by the renewable portfolio standard.

There is some other evidence that biomass will be stimulated, but I think it is a fair comment to say that this is mostly a wind portfolio standard. And my argument is, that may be fine in North Dakota—which the Senator from

North Dakota says is the Saudi Arabia of wind—maybe it works there, and maybe North Dakotans want to see the wind turbines there, but it doesn't work in Tennessee and in most of the Southeast because the wind simply doesn't blow enough to produce much electricity.

The National Academy of Sciences says 93 percent of potential wind energy capacity occurs west of the Mississippi River. We can see on this chart that in this white area, that is where there is the least amount of wind. There may be plenty of it somewhere else but not in Tennessee and not in the South. There is only one wind farm in this entire southeastern part of the United States. That is a TVA wind farm on Buffalo Mountain, which I will show in just a moment.

TVA had hoped that the wind on Buffalo Mountain would blow to produce electricity about 35 to 38 percent of the time. They have been disappointed that it only blows about 19 to 24 percent of the time. And in August, when we are sitting on the porches sweating, perspiring, and wanting our fans on and air-conditioning on, the winds on the only wind farm in the southeast—Buffalo Mountain—blew just 7 percent of the time. That is not an estimate. That is an actual count from TVA and the wind farm.

So the only places in the southeast region, if we can go to the next chart, that have wind resources are the ridges and the crests. Maybe unlike Iowa and North Dakota where they can have large wind farms, maybe even in Colorado they can have large wind farms, but in Tennessee, the only places that wind possibly works are on the ridges and the crests. In addition to being the places with the most wind, the ridges and the crests are also in the most visited national park in the United States, the Great Smoky Mountains National Park. Those are the highest mountains in the Eastern United States. They run up through Pennsylvania as well. They are the Great Smoky Mountains and the mountains around them. They are the reason most of us live in those areas.

It is quite a sight to see when you put wind turbines on top of those mountains. It is a sight that I would rather not see. Here is West Virginia, which is north of the southeastern part of the United States. Basically it cuts off the whole tops of those mountains. In my opinion, it makes strip mining look like a decorative art. These are 400- or 300-foot turbines. These are not your grandmother's windmills. They are white and large and have flashing red lights on top of them. You can see them for 10, 12, 14 miles away.

Then, since they are on remote ridgetops, they have to dig large power lines down through whomever's backyard to get there. It is quite a dislocation in the scenery. So one would think there would have to be a big payoff before we would take some of the most beautiful parts of the United States and basically ruin the mountaintops.

Here is what it looks like in Tennessee. You can get a little sense of how big these turbines are. In Tennessee, we like football and we can put things in perspective, sometimes putting things in football terms. Each of these wind turbines is twice as tall as the skyboxes at Neyland Stadium, which is the second largest football stadium in the United States. Penn State has one, I guess, about the same size. These rotor blades, which go round and round, stretch from the 10-yard line to the 10-yard line. I can see these turbines from the Pellissippi Parkway in Tennessee from about 14 miles away. This is at about 3,500 feet. These are some of our most beautiful vistas in Tennessee.

The problem is, even here, which ought to be a prime spot—this is the reason TVA put the turbines here—it didn't work very well. It was a disappointment. As I mentioned, in August, the wind turbines only operated 7 percent of the time. Wind tends to be strongest during the winter months and at dawn and dusk, but demand for electricity is highest during the summer and during the day. Basically, when we need the wind, it doesn't blow. And a point that many people often miss is that you can't store it. Unlike more conventional forms of power, you use it or you lose it. So it is of minimal help.

Also, it is more expensive. I have a chart showing the expense. Let's take nuclear power which produces 70 percent of the carbon-free electricity in the United States today, and wind, which is also carbon free. Actually, both are completely free of carbon, sulfur, mercury, and nitrogen, which are the problems for clean air in the Tennessee region. Let's compare a 1,000-watt nuclear plant reactor and a 1,000-megawatt capacity wind farm. The 1,000-megawatts is about the size of a new nuclear reactor. The new Browns Ferry plant in Tennessee that opened the other day is 1,280 megawatts. This column is the number of hours per year for both nuclear and wind. And this second column is the capacity factor.

In plain English, this is how much they operate. For TVA, its nuclear powerplants, which produce about one-third of our electricity and most of our carbon-free electricity, the nuclear powerplants operate 92 percent of the time. The wind turbines operate, at best, 24 percent of the time in the Southeast, in the area we know about. Remember, there is only one wind farm in the Southeast. We have it, and that is what it does.

The cost of electricity is up to twice as much for wind over nuclear. That is what people in the utility industry call the all-in cost—that is, including the cost of building the facility and the cost of operating the facility.

So the brief analysis is that wind is more expensive, on a per unit energy generated basis, and produces much less energy than nuclear power, for example. In addition to that, if we build

the wind turbines, we still have to build and operate the nuclear power-plant because, as we pointed out, the wind turbines only operate about 22 percent of the time.

My hope would be that we would not have a one-size-fits-all national mandate on States that are seeking to create clean energy. Tennessee wants to do its part. As I said, nuclear power creates 70 percent of the carbon-free energy in the United States. It produces 33 percent of the carbon-free energy in the Tennessee Valley through TVA, and TVA just opened a new reactor and they are planning more. Why would we impose on a State which is already leading the country in terms of helping to produce clean energy, carbon-free energy—why would we impose a mandate on that State that would raise its rates or impose new taxes and drive away jobs from industries that cannot afford to pay the higher rates and at the same time put on our mountain tops, from Bristol to Chattanooga, these huge wind machines that destroy the view?

We have 10 million people every year who come to Great Smoky Mountains National Park, nearly three times as many as come to Yellowstone. They come to see the mountains; they don't come to see the wind turbines. I guarantee, if we continue to provide incentives and mandates to put up these 300-, 400-, 500-foot-tall wind turbines with red flashing lights, that is all the visitors will see when they come to Tennessee. They will not be able to see anything else.

I am eager to work with Senators BINGAMAN and DOMENICI on the Energy bill. I had the pleasure, the last 4 years, of serving with them on that committee. I admire the way they work together. They made a point 2 years ago of saying that when we go too far in either direction, we will pull back a little bit so we can make sure we have a good, strong bill. I believe the bill in 2005 was underestimated. I believe the bill produced in 2005, produced by Senators DOMENICI and BINGAMAN and the Senate working with the House, literally set America on a different course in terms of producing large amounts of reliable, affordable, clean energy. It helped us do that in a way that would keep the costs of natural gas down, which was very important to us at that time and still is today.

I ask unanimous consent to have printed in the RECORD a letter from the Southeastern Association of Regulatory Utility Commissioners expressing the same views I have just expressed, that such a mandate would cause us to end up paying higher electric prices with nothing to show for it. I ask unanimous consent that it be printed in the RECORD following my remarks.

The PRESIDING OFFICER (Mr. CASEY). Without objection, it is so ordered.

(See exhibit 1.)

Mr. ALEXANDER. Finally, I would like to reiterate what we could better do with the money. I see the Senator from North Dakota here. I mentioned a little earlier that he has said North Dakota is the Saudi Arabia of wind, and I admire North Dakota for that, I admire him for his outspoken advocacy of that, and I hope all the giant wind machines go to North Dakota. That is where I would like them to be, just not in Tennessee—not just because of how they look but because in our neck of the woods they do not work. They raise our taxes, or they raise our rates, or they destroy our mountains, or they run away jobs from industries and tourists who do not want to be part of that. I would rather see us look for better ways to spend those dollars.

As I suggested earlier, we could take the same amount of money we would be taxed, if we choose not to build these, by providing 205 million \$2 light bulbs, which would be the equivalent energy savings of almost 2 nuclear reactors, or it would be the equivalent of 3,700 of these wind turbines, which would run along the ridge tops from Bristol to Chattanooga, or it would pay the monthly electric bill for Tennessee's 2.5 million TVA residential customers, every Tennessee residential customer, for a month and a half, or it would put a new scrubber on TVA's coal-fired powerplants every 9 month period.

I am afraid this is an idea looking for a problem to solve. It may solve it in North Dakota, it might solve it in New Mexico and perhaps it does in Colorado, but it does not in Tennessee. It raises our taxes, raises our rates, ruins our mountains, and it sends jobs away, runs them away.

I hope, in a spirit of bipartisanship, perhaps the Senator from New Mexico, one of our most thoughtful Senators, the leader of this debate, will decide there are other things we can focus on rather than a one-size-fits-all mandate which may work in some States but does not in my State.

I yield the floor.

EXHIBIT 1

SOUTHEASTERN ASSOCIATION OF
REGULATORY UTILITY COMMISSIONERS,
Little Rock, AR, May 31, 2007.

DEAR SENATORS BINGAMAN AND DOMENICI, AND CONGRESSMEN DINGELL AND BARTON: The undersigned state utility commissioners are writing to express our concerns about the nationwide, mandatory federal renewable portfolio standard (RPS) being discussed/introduced by Senator Bingaman. As state regulators, we are responsible for ensuring that retail electricity consumers receive affordable, reliable electric service. We are concerned that a uniform, federal RPS mandate fails to recognize adequately that there are significant differences among the states in terms of available and cost-effective renewable energy resources and that having such a standard in energy legislation will ultimately increase consumers' electricity bills.

The reality is that not all states are fortunate enough to have abundant traditional renewable energy resources, such as wind, or have them located close enough to the load to render them cost-effective. This is espe-

cially true in the Southeast and large parts of the Midwest. Even in regions of the country that do have access to wind energy, there is frequently stiff local opposition to building huge wind turbines, significant costs for the additional transmission needed, and reliability concerns. As a result, some wind renewable energy projects do not get built, while others take years to build. The availability of other renewable energy resources, such as geothermal, is even more limited.

Because of the limited availability and cost-effectiveness of traditional renewable energy resources, we are deeply concerned that our utilities will be forced to buy renewable energy credits from the federal government or from renewable energy generators in other regions of the country. Correspondingly, our retail electricity consumers will end up paying higher electricity prices, with nothing to show for it.

Renewable energy resources may be able to make a significant contribution to energy production in those regions of the country that have abundant renewable resources. In fact, over 20 states and the District of Columbia have already seen fit to approve their own RPS programs based on the resources available to them. Moreover, those states have included a wider array of energy resources in their definitions of eligible renewable resources than the proposed federal RPS mandate. Some states consider power produced from municipal solid waste, small hydroelectric facilities or coal waste to be renewable energy. Other states count expenditures on demand-side management or alternative compliance payments toward meeting the state RPS requirements. None of these alternative renewable energy resources, however, would receive credit under the Senate version of a federal RPS program.

While state public service commissions and energy service providers should certainly consider available and cost-effective renewable energy resource options as they make long-term decisions for incremental energy needs, the imposition of a strict federal RPS mandate, as contrasted with a state-driven cost-effectiveness determination, will only result in higher electricity prices for our consumers. Because the availability and cost-effectiveness of traditional renewable energy resources varies so widely among states and regions, we believe that decisions regarding renewable energy portfolios should be left to the states. If, however, the Congress desires to address renewable energy objectives in the upcoming Energy Bill, we urge you to expressly allow each individual state to determine the extent to which renewable energy can be reliably and cost effectively utilized within that state.

Sincerely,

(Signed by Members of the Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee commissions.)

The PRESIDING OFFICER. The Senator from Colorado.

Mr. SALAZAR. Mr. President, I see my colleague from North Dakota wishes to speak.

The PRESIDING OFFICER. The Senator from North Dakota is recognized.

Mr. DORGAN. Mr. President, I am pleased to be here supporting a piece of legislation which I think advances this country's energy interests. I am a member of the Senate Energy Committee. I have worked with Senator BINGAMAN and Senator DOMENICI not only on the previous Energy bill in 2005 but on this Energy bill, and I think this is a good bill. We are going to improve it some on the floor of the Senate, but it came out of the Energy

Committee as a bipartisan bill and one I think will improve the energy policy in this country.

Energy is a very important policy. We don't think about it much. I know most all of us get up in the morning and we just flick a switch someplace in our house. That switch turns on lights and we turn on the television set, it turns on all the things we use all day. While we are sleeping, the air-conditioner is running. We have all these conveniences, and we do not necessarily understand that all of it comes from somewhere beyond a switch. So energy has been pretty easy for this country. Now we are running into some interesting questions and challenges. We have to develop a more thoughtful, more sensible energy policy for the long-term future.

There is an airplane which is now parked in a museum. I believe it was tail No. 27,000, an old 707 that used to be Air Force One. It was the Air Force One that flew President Reagan around, and others. It was the Air Force One that was in Dallas, TX, in fact, the day John F. Kennedy was assassinated. One of its last trips before it was retired to a museum was a trip to Asia. I was a member of that delegation, going to meet with the President of China and others.

In a cabin on that little old airplane flying over the Pacific one night, about 10 or 11 o'clock at night, one of our Senate colleagues, John Glenn, was sitting there with us. I was peppering John Glenn with questions about his circling the Earth as an astronaut back 40 years prior to that time. I was a young kid and I had been listening to the radio that day, and I listened to this account of this astronaut circling the Earth. The whole world was focused on what this astronaut, up alone in *Friendship 7*, a tiny little capsule, was doing.

I asked him a lot of questions about it that evening. I had the opportunity as a new Member of the Senate with my colleague John Glenn to pepper him with a lot of questions. One of my questions was this. I said: My understanding back then was that the city of Perth, Australia, when you were orbiting the Earth that night, turned on every light in the city as a signal to the astronaut flying alone orbiting the Earth. Do you remember the ability to look down and see the lights from Perth, Australia?

He said: I do, I do. I remember this brilliant light coming up from Perth, Australia, where all the citizens decided to shine up a light to this astronaut flying alone on *Friendship 7*.

The only evidence of life on Earth as he orbited the dark side of the Earth was energy, light—human beings turning on a light switch and lighting a city to light the way for an astronaut orbiting the Earth.

Energy is a significant part of our lives every single day and virtually in every way. As I said, we take it pretty much for granted.

Let me talk about the challenges, if I might. One of the significant challenges is oil. We have this big old planet of ours. We have roughly 6.5 billion neighbors on this planet. We circle the Sun. We have this prodigious need for oil, so we stick straws in the earth, called drilling rigs, and suck oil out of the earth. We suck about 84 million barrels of oil a day out of this planet of ours—84 million barrels a day we suck out of this earth.

We use 21 million barrels in this country alone. In this little patch of ground called the United States of America, we have built an unbelievable economy, dramatically improved the standard of living over a long period of time, and we have an unending thirst for oil. So one-fourth of all of the oil used on this planet is used in this country, this place on the globe.

Unfortunately, a substantial amount of the oil is under the sands of the Middle East and in unstable parts of the world. Here is what happens. When we import oil, here is what we use the oil for: 67 percent is used for transportation. So nearly 70 percent of the oil we use in this country is used in the vehicle fleet or for transportation. One of the things we are discussing here in the Energy bill is this issue of trying to make these vehicles more efficient. If we use 70 percent of the oil in this country for transportation and we have had very little change in efficiency of vehicles, then the question should be and is, Should not we make vehicles more efficient?

Here is an example. This is a chart you can't see particularly well: Auto Fuel Efficiency Versus Performance. Do you see what has happened on the blue line, performance—zero to 60 in a nanosecond? Increased performance, more power, more speed. What has happened with respect to miles per gallon? Just like that, right flat across.

Part of that is the consumer. The consumer wants to buy big, heavy cars, fast cars. I understand that. In fact, here is a survey. I was very surprised. CNW Research pointed out that overall fuel economy—this is a couple of years ago—is No. 12 in concern by consumers. I am sure it has changed now. But cupholders and sound systems ranked above the issue of overall fuel economy. I expect that is not the case now when you are driving up to the gas pump and in some vehicles putting in \$40, \$50, \$60 or \$70 worth of gasoline into that vehicle. So perhaps that has changed.

But this legislation does a lot of things with respect to energy. It requires an improvement in the efficiency of vehicles. I know automobile companies came here last week. I had a chance to talk to the CEOs of the three big U.S. auto companies. I know they are taking the same position they have always taken—not now, not us, not today.

The fact is, we must, it seems to me, insist that our vehicle fleet be more efficient. Because nearly 70 percent of

the oil we use in this country is being used in our vehicles, the only way we are going to try to extract ourselves from being addicted to foreign oil is to begin to make changes in a range of areas, and that includes making cars more efficient. That means a higher mileage per gallon standard.

We have a circumstance, as I indicated, where a substantial part of the oil is put in one place on this planet and the dramatic need for oil is in another place. Much of where we get our oil is in very troubled parts of the world. We could, one day, wake up with terrorists attacking a refinery somewhere and a shutoff of the oil to this country from foreign sources, and this country would be flat on its back. This country would have its economy in tatters. That is why we need to be much less dependent, we need to find a way to be independent of the need for oil from Saudi Arabia and Kuwait, Iran, Iraq, Venezuela—all the places in the world that are unstable, where we have a great reliance on oil. That is at least part of what this bill is about.

I am going to talk about several other things as well, but I, along with my colleague, Senator LARRY CRAIG, a Republican—I am a Democrat—we joined in introducing something called the SAFE Energy Act, Securing America's Future Energy. The Energy Security Leadership Council is a group of really interesting people including some CEOs of major corporations and flag officers in the U.S. military. They studied these issues for several years and put together a plan.

That plan is recommendations to the Nation on Reducing Oil Dependence; trying to make this economy of ours less oil intensive.

I introduced a piece of legislation with Senator CRAIG that implements most all of these recommendations. I would commend it to my colleagues because I think it makes a lot of sense. It talks about expanding the supply of energy, especially renewable energy; also talks about finding additional supplies. We believe we ought to be able to explore and drill more in expanded areas, particularly in the Gulf of Mexico, because there are substantial reserves of oil and gas in the Gulf of Mexico that are attainable without ruining anybody's view or creating other problems.

We believe that in addition to renewable energy and the production of renewable energy, all of the biofuels are necessary. We believe that CAFE standards, or at least automobile efficiency standards, are necessary as well. This piece of legislation brought to the floor of the Senate includes all of them.

Let me continue to talk about oil for a moment and say that when I was a little boy, I remember they drilled one oil well near my hometown in southwestern North Dakota. I lived in a town of 300 people. There wasn't a lot to do, obviously, in a town of 300 people.

So when they brought in a drilling rig and constructed a drilling rig and

started to drill for oil about 3 miles from town, I will never forget as a little boy going out there in the evenings in my parent's car. We saw all these lights on the oil rig at night. We sat there and looked at it. That was entertainment.

We did that night after night. We figured at some point they were going to strike oil. We didn't want to be too close to the rig, because the movies showed that when you strike oil, you get a gusher.

But we watched. We would drive out there and park, the whole town would go out there and park. We would watch that oil well. Nothing was happening, of course, nothing you could see. We saw the lights. That was a whole lot more than was going on in town.

Well, it turns out it was a dry well; never drilled another one. But that was my experience. As a young boy, my father also managed a gasoline station. So I pumped a lot of gas as a young boy. Some say that my occupation hasn't changed so much being in the Senate, but I contest that, of course.

My point is this: Oil is central to our lives and will remain central to our lives, but we need to find a way to reduce our dependence on the sources of oil that come from very troubled parts of the world.

In North Dakota, for example, in western North Dakota, we now have what is called the Bakken Shale, which could, we hope—the U.S. Geological Survey will determine this—but it could contain dramatic amounts of recoverable oil.

Incidentally, I was in western North Dakota visiting with Marathon Oil that is now drilling. It is unbelievable what they are doing. They drill 2 miles down—2 miles down—then take a giant bend and drill 2 miles out. One drilling rig. They go down 2 miles and then bend it and then drill 2 miles out. It is unbelievable technology.

We hope there is additional production here in this country. That is one way to be less dependent on foreign sources of oil. We can take a look at where you can get additional oil. I mentioned the Gulf of Mexico is a substantial opportunity for us as well. But there are a lot of things for us to do and do well, if we are going to be less dependent on foreign sources of oil, also, if we are going to have an energy policy that has much more credibility than our current policy.

Now, the Congress passed what was called the Energy Policy Act of 2005. We did a number of things there. I was one of the Members of the Congress who, at that time and since that time, one of I guess four or five of us in the Senate who tried to open up what is called Lease 181 in the Gulf of Mexico. We succeeded in doing that. It is a smaller tract than we had hoped, but that also will contribute to the production of additional energy here at home.

Some say our energy strategy for the future must be "digging and drilling." I call that yesterday forever, digging

and drilling. Yes, we are going to dig and, yes, we are going to drill. But if that is all we do, we lose. Everything we use in this country every day needs to be more efficient. Our refrigerators, our air conditioners, our vacuums, everything needs to be more efficient. That is No. 1.

We have had very big debates on strange-named things such as SEER standards. I mean how many people have heard of SEER 13 standards for air conditioners. But it makes a big difference in the number of powerplants you have to build in this country based on the standards for efficiency for all the things we use with respect to appliances.

In addition to all that, we at the same time have to rely on other sources and other types of energy; wind energy as an example. Well, my colleague from Tennessee apparently does not like wind energy. God bless him. He has a right not to like wind energy.

It seems to me it makes a lot of sense with a turbine, the much more improved turbines and technologically capable turbines, to extract the energy from the wind and turn it into electricity. Yes, it is an intermittent source of electricity because you do not produce it when the wind is not blowing. But in some States, my State in particular, which is ranked by the Department of Energy as having the largest wind energy potential, taking energy from the wind and producing electricity with that energy makes a lot of sense.

We have an exciting experiment going on in North Dakota that I have been involved in: taking energy from the wind through a wind turbine, turning that energy through a turbine into electricity, using electricity through the process of electrolysis to separate hydrogen from water. You use an intermittent energy source to produce hydrogen and store the hydrogen. That is pretty unbelievable. Yet we can do that. We can do that, and it is going make us less dependent on foreign sources of energy.

Now one of the proposals that will be offered by my colleague, Senator BINGAMAN, which I intend to be here and support, and I believe several have spoken in opposition to it, is what is called a renewable portfolio standard. Not a very sexy name, in fact we should rename it, renewable energy standard of some type.

But it is simply this: With respect to electricity that we are creating in this country, 15 percent of that electricity should come from renewable sources. Establishing a national standard, a goal, what is it we want to meet? Where do we want to go? An old saying: If you don't care where you are, you will never be lost.

Well, I mean, if we do not care where we are, we will never have a standard that we will miss. But how about ascribing a standard for this country that forces us to reach a little bit and says that, for every kilowatt hour of elec-

tricity we are going to use, 15 percent of what we produce is going to come from renewable sources of energy.

Once again, it relieves and begins to withdraw our heavy dependence on foreign sources of oil because a substantial amount of our electricity now comes from fossil fuels, from natural gas and coal and so on.

Now, the issue of the renewable portfolio standard, I understand, is going to be controversial because some do not want the Federal Government to be involved in requiring something such as this. But, frankly, I don't think we have much choice. The other issue that will be involved in with this bill, which I support, is a renewable fuels standard. That renewable fuels standard is one that calls for 36 billion gallons of renewable fuels by 2022. Now, I helped write the last renewable fuel standard. It was the first one we ever established. It was 7½ billion gallons by 2012.

We are going to be at 10 billion gallons, exceeding that standard in a year or two. We believe we should aspire to achieve much more; a renewable fuels standard, using the biofuels; yes, the production of ethanol; growing energy in our farm fields on a renewable basis, you can do that year after year; the ethanol that can come from cellulose that I believe has great capability in our future. All of that is good for this country.

It is good for our farmers, good for our consumers, it is good for beginning to reduce our dependence on foreign sources of oil. Now, we have a lot of issues we are going to be discussing, some controversial, some perhaps not, but my hope is that in the coming week and a half or so we can finish this Energy bill.

I wish to show a couple of charts again. First of all, the amount of oil we use in this country. Those are million barrels per day. I mentioned we suck 84 million barrels of oil out of this little planet of ours. Look at what we use in the United States. Our population uses one-fourth of all the oil that is taken out of this planet every single day.

I mean, that is an oil intensity for our economy that, in my judgment, needs to be changed. Then, finally, let me say again, if 70 percent of that oil, nearly 70 percent is used in that vehicle fleet. If in that vehicle fleet we have seen all those improvements in acceleration, for example, and no improvement with respect to miles per gallon, then we better figure out how we address this in a different way.

One other item I am going to talk about for a moment is something called SPR. One of the problems with this life is there are so many acronyms and so many shorthand names for things, the Strategic Petroleum Reserve. We are doing something that makes a lot of sense to me. We are taking oil and sticking it underground and saving it for a time when we might need it, a security reserve of oil. The Strategic Petroleum Reserves makes sense to me. In fact, we increased the

amount of that SPR authorization in the 2005 Energy Policy Act. But with respect to our original goal, we are 97 percent there—97 percent. I do not think it makes any sense at this point to increase it, despite the authorization, I do not think it makes any sense, when the price of oil is where it is, very high—the price of gasoline is extraordinary—I do not think it makes sense to be taking any oil out of the supply chain and sticking it underground.

Yet our Government continues to do that. I know we have not been purchasing oil at this point. They suspended that through the summer driving season. But we are still taking about 8 or 9 million barrels of oil and putting it in SPR as part of the payment for royalties in kind. I do not support that either.

The President is asking for a near doubling of SPR in the next appropriations cycle. I am not going to support that. I am going to write the bill. I will be writing the bill as chairman of the appropriations subcommittee that funds that. I am not going to increase that because I think at a time when gas prices are going through the roof, the last thing we ought to do is take oil out of the supply, because all that does is put upward pressure on gas prices. So I believe that is another thing we might wish to consider in this discussion.

Finally, the issue of energy is one that I know consumes perhaps less attention from time to time than others, because we take it for granted. We turn the light switch on, we get in our car, we do all these things, all of it powered as a part of our energy need, and we do not think much about it. But if, God forbid, somehow all of it were turned off, and we had an example a few years ago, I think we were out of energy in the capital region for 5 or 6 days, then all of a sudden we understood what energy means to our daily lives.

If ever we would see gas lines around the block again, we would understand what this addiction to oil means for our daily lives. Now, I said earlier that if our entire approach with respect to energy is digging and drilling, that is yesterday forever. I do not mean we will not continue to use fossil fuels, I believe we will. Fossil fuels will be a significant part of our future.

That means oil, coal, and natural gas. I am going to spend a lot of time and money as chairman of the appropriations subcommittee dealing with this issue of clean power and clean coal technology because we have to be able to continue to use that resource. But it is also the case that we have so much more to do. Because for decades we have been told that you cannot do renewables, renewables are a pat-on-the-head sort of thing. If you are talking about renewables, good for you, God bless you, but you ought to go to a library someplace and visit with your two or three friends about these things; it does not matter to America's future. That is total nonsense.

Renewable energy is very important for this country. It is long past the time that we get about the business of dealing with it. Yes, it is hydrogen and fuel cells, which I feel very strongly about. It is wind and solar. It is geothermal. It is a wide range of issues dealing with renewable energy that I believe will contribute to this country's energy security. I believe it will give us a much better and a much stronger energy policy.

I see my colleague from Idaho is here. As I indicated earlier, he and I have introduced a piece of legislation that a fair part is included in the bill that was reported out of the Energy Committee. I am also on the Commerce Committee, which has reported a portion of this bill as well.

I believe we need do a lot of things well in order to make this country less dangerously dependent, as we now are, on foreign sources of energy. That is our goal.

I believe our plan does that. I believe the bill that is brought to us from the Energy, Commerce, EPW, and Foreign Relations Committees advances this country's interest.

My hope is, in the coming week or two, perhaps a week and a half, as this is being considered, we can improve the bill even more.

I yield the floor.

The PRESIDING OFFICER. The Senator from Idaho.

Mr. CRAIG. Mr. President, the Senator from North Dakota and I over the years have coalesced around a variety of issues we have been successful on on some occasions in causing to become public policy. Earlier this year—and Senator DORGAN has already mentioned it—we coalesced around three concepts we thought were critically necessary in a current and future energy portfolio and, therefore, the public policy that drives it. We recognized that efficiency would be and must be a part of the equation, that clean energy, the biofuels, must be a part of the equation for the future to make us less dependent. But also something that must be a part of the equation is production of current known and future sources of hydrocarbons. In other words—I will quote the Senator from North Dakota—you can't conserve or drill your way out of the current \$3-plus gas we have and the greater dependency we have on foreign nations to supply us, but a combination of both into the future brings us to where this great country ought to be from the standpoint of a national energy policy.

The Reid bill, the Bingaman bill that has been introduced on the floor, S. 1419, is about the future. You can stand on a hilltop and see it out there 25 or 30 years into the future. But the man or woman of the American economy today who is at the gas pump and filling his or her car or truck wants to know about tomorrow and next week and next year. Are gas prices going to continue to go up? What is the problem here? Why isn't this great Nation more

self-sufficient? And for those who study energy a good deal and see a 60-percent reliance on foreign production, shouldn't we be worried about national security? Shouldn't we be worried about the emergence of petronationalism, about a little dictator down in Venezuela jerking the tail of a great country because he supplies 17 percent of our total foreign imports? Yes, we ought to be concerned about that. We ought to be angry about it.

The reason we grew complacent, the light switch would always produce a light or the gas pump would always produce inexpensive fuel, is because it has always been there. What a large part of Americans didn't know is that politically and in a public policy way we began to set in place a series of things over the last 20 years that flattened production, made it less profitable, created self-reliance, and didn't compete and keep up with the amount of consumed energy we were requiring of a growth economy. As a result, we hit the wall. The wall is \$3-plus gas. All power bills are going up. Energy is a part of America's disposable income and is becoming an increasingly bigger part. Americans are sitting now scratching their heads and saying: Are we going to have to change our lifestyles because energy is going to cost a lot more?

My wife and I and a group of Senators, the week before last, traveled in Europe. As we landed at Andrews Air Force Base, got in our cars and headed home, I turned to my wife and said: I see we are back in the land of the big cars.

That is part of our addiction. We love our big cars. We had been traveling in Luxembourg, France, and Italy, and by definition, it is the land of the little car. Why? Because gas over there from a gallonage point of view is about \$7.50 a gallon. It is at least double plus a little more of what we are currently paying today. As a result, Europeans significantly over the last 20 years have changed their lifestyles because they couldn't afford the energy. I am not going to apologize because America consumes a lot of energy. We are nearly 26 percent of the world economy. We consume 26 percent of the energy base. Why? Because we are 26 percent of the world economy. It takes energy to produce jobs, to produce products, to create an economy. We are driven by energy. It is going to cost more to stay at 26 percent if we don't develop good public policy that gets us through tomorrow and takes us into the future in a way that the consumer can understand and appreciate.

Consumers are angry today, and they have a right to be. They look at very large profits on the part of the oil companies and say: Look, it is their fault. Those profits are driven by demand and the ability to supply. There are no gas lines today because there is energy at the pump, but we are paying more for it. The Senator from North Dakota is

right, the politics of this issue would change again if there were long gas lines at the pump and they were paying \$3-plus a gallon. So the supply is there in the current form, but 60 percent of it comes from a foreign nation somewhere in the world. Most of those supplies and those foreign nations are in very precarious political situations. It is a very unstable world out there from whence these supplies come. As a result, the futures market anticipates that and builds a margin in to offset the risk to deal with the demand.

What am I saying here? I am saying to the Senate today that S. 1419 is a piece of the total, but it isn't where we ought to be tomorrow. Tomorrow ought to be about energy security and energy production. You don't talk green, although you have to talk green and should talk green. You don't talk cellulosic ethanol being in production in 10 years at a rate of 15 billion gallons a year because it won't be, because the technology isn't there, although we are driving there. Energy efficiency, a CAFE standard, is a place we ought to go. I for the first time join with the Senator from North Dakota in a 4-percent mandatory efficiency. That takes us down the road. But that is out in the future. What about tomorrow? What about knowing where our current oil reserves are, the 15 or 20 billion barrels or more of oil that is in the Outer Continental Shelf that may be very accessible in a clean and environmentally sound way? What about expanding our refinery capacity? Because in this transitional period of the next two-and-a-half to three decades, where more cars will be electric, more cars will be hybrid, we will be producing 20 percent of our liquid transportation fuels from corn-based ethanol, cellulosic-based ethanol, to get to the 30 to 32 billion gallons a year. What about all of that? That is our future.

My consumers in Idaho want to know about tomorrow. The Reid-Bingaman bill has nothing to do with tomorrow. We simply cannot ignore the next 10 or 15 years and jump into the future. We have to continue to produce and we need to produce. We have to continue to refine the hydrocarbons to supply the gas, and we need to expand that capability. It better be on shore. It better not be in Venezuela or in Kuwait or Saudi Arabia or someplace else that is at this moment, at best, politically unstable, let alone Iran and Iraq. That is where our dependence lies today. To fail to address that in the Senate is to fail to address the No. 1 question of a great nation: How do we stay great? How do we stay at 26 percent of the world GDP? How do we stay generous to the rest of the world? We produce and push a lot of new technology, and that is in part what the Reid bill is about. That is all going to be transparent and giveable to the rest of the world. When we lead on energy in all aspects, the rest of the world benefits because we share it.

Therefore, as this bill comes to the floor, there is a great deal that has to

be done. We need a new RPS, renewable portfolio standard, wind, solar—a great idea, an old concept. Today's energy world is about cleanliness. Why not a new standard? Why not a clean portfolio standard instead of a renewable portfolio standard? Include wind, include solar, include sequestration of carbon, include efficiencies, include nuclear, include hydro. Let's get on with the business of being clean. If Senator REID wants to come to the floor and talk about climate change, then he ought to be talking about all of those other things that drive the economy toward a cleaner energy future, not command and control but incentives, creativity, bringing off the laboratory shelf and into production the kind of things we know are already out there.

Coal to liquids, what is wrong with that? Some environmental groups are wringing their hands and saying: There might be a problem there. We know it will burn 90 percent cleaner. That is not a problem. It is only in the mind of some idealist that it isn't perfect. How do you get to perfection? You start by adjusting and changing and improving. Today we are tremendously proud of our ethanol production in corn. But it has been 20 years in refinement and development to the distillery that is set up tomorrow somewhere in the Midwest. It is going to be so much better than the distillery that went into production a decade and a half ago. That is what this bill ought to be about, and it isn't there today.

What about the tax incentives, and what is the Finance Committee going to do? None of that is there.

This chart illustrates the problem. Here is the line for demand; here is supply. This is the hydrocarbons. That is pretty simple. Where does this margin come from? Offshore, foreign countries. High risk, less national security. Why do a lot of military leaders and those who look in broader terms support what BYRON DORGAN and LARRY CRAIG did today in the SAFE bill and those three factors about production, efficiency, and biofuels? They support it because of national security, taking this out of the equation, getting us back into production.

You have heard me talk a lot over the past about the Outer Continental Shelf and the billions and billions of gallons of oil that is out there. We have allowed States to say no even though it is a national, Federal resource. Last year we picked up a little bit right here in lease sale 181, but here in the eastern gulf are phenomenal resources, billions and billions of barrels of oil that are very accessible, achievable in a sound environmental way, and we are still saying no. We are still saying, let a tinhorn dictator in Venezuela jerk us around.

Here is another problem. The Cubans have said: Come drill us. The world is coming. The world is drilling in Cuba today. Vietnam came in last week. Spain, Norway, Malaysia, and Canada are 45 miles off our shore drilling for

oil, but we can't drill. It is the ultimate "no" zone of politics. The "no" zone went up decades ago when the technology wasn't there to achieve the environmental standards upon which we demand and insist. The technology is here today. But the politics of Florida won't allow us to touch this. So the American consumer simply says: OK. I am going to pay more. I am going to pay another 50 cents a gallon so Florida can have its political way or anywhere else, for that matter, along the eastern seaboard or as it relates to this equation over here, the western coast, Alaska. Or have we come to a turn in the road where technology allows us to go there in a clean way and bring down that dependency, allows us to thumb our nose, if you will, at the foreign sources?

Here is the other side of the equation. Nearly \$300 billion a year leaves our shore to go to another country to buy their oil, and some of those countries are buying guns and shooting at us. How smart we aren't to allow that policy to continue to prevail.

That is part of the debate in the coming weeks as it relates to 1419. It is not a complete package. It is way out into the future. It is not about tomorrow. It is not about national security. It is not about production. If we don't have those factors in a bill, this Senate will not serve its public and the American consumer in a responsible way in sustaining and building a great nation.

I yield the floor.

RECESS

The PRESIDING OFFICER. Under the previous order, the Senate stands in recess until the hour of 2:15 p.m.

Thereupon, at 12:30 p.m., the Senate recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Mr. CARPER).

The PRESIDING OFFICER. The majority leader is recognized.

MOMENT OF SILENCE TO HONOR AIRMEN, SOLDIERS, SAILORS, AND MARINES LOST IN IRAQ AND AFGHANISTAN

Mr. REID. Mr. President, we have reached another tragic milestone in the Iraq war: 3,500 American troops have now been lost. Every one of those 3,500 is a hero. But every brave man and woman who continues to serve and protect us is a hero as well.

This is a somber time. At a somber time such as this, words betray our grief and our gratitude. So I ask my colleagues to join me in a moment of silence to honor the memory and sacrifice of every airman, soldier, sailor, and marine we have lost in Iraq and Afghanistan.

The PRESIDING OFFICER. Without objection, it is so ordered.

The Senate will observe a moment of silence.

(Moment of silence.)

Mr. REID. Thank you very much, Mr. President.